

REMARKS

Reconsideration of this application is respectfully requested in view of the foregoing amendment and the following remarks.

By the foregoing amendment, claims 3-5, 9-13, 17, 20-21, and 23-28 have been amended and claims 29 and 30 have been added. No new matter has been added. Thus, claims 1-7, 9-15, 17-18, 20-21, and 23-30 are currently pending in the present application and subject to examination.

In the Office Action mailed May 19, 2006, the Examiner objected to claims 17-21 and 28 under 27 C.F.R. § 1.75 as being in improper form because they are method claims including the subject matter of the apparatus. Claims 17 and 20 have been amended responsive to this objection, and claims 27 and 28 have been similarly amended.

The Examiner rejected claims 1-15, 17, 18, and 20-28 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,338,525 to Kilgore ("Kilgore"). It is noted that claims 3-5, 9-13, 17, 20-21, and 23-28 have been amended. To the extent that the rejection remains applicable to the claims currently pending, the Applicant hereby traverses the rejection, as follows.

Applicant's invention as set forth in claim 1 is directed to a system for at least one of reducing speed and limiting the motion of a motor of a propulsion unit, the system comprising, in part, a switch arrangement disconnecting the propeller motor from the electrical power network and for short-circuiting the stator windings of the propeller motor.

The Applicant respectfully submits that Kilgore does not disclose or suggest at least the combination of a switch arrangement disconnecting the propeller motor from the electrical power network and for short-circuiting the stator windings of the propeller motor, as claimed in claim 1.

The Examiner cites column 7 line 31 to column 8, line 32 in Kilgore as teaching “a switch arrangement (18, 20, 44) for disconnecting the propeller motor (switch 18) and for, short circuiting or dynamic braking (switches 20 and 44 are closed), the stator windings (switches 20 and 44) of the propeller motor.” The Applicants respectfully traverse this assertion.

In column 7, lines 23 to 37, Kilgore teaches that prior to event R, the ship is running full speed ahead with switches 18 and 44 closed and switch 20 opened with the generator 12 and the electric motor 16 mechanically connected directly to the propeller 24. Thus, the electric motor 16 is connected to the electrical power network and to the generator 12, because switch 44 is closed.

At event R, Kilgore teaches the fuel supply to the turbine is stopped, but does not disclose or suggest that the electric motor should be disconnected from the electrical power network (and from the generator 12). (See column 7, lines 23-37). Referring to the previous sentence, switch 44 remains closed.

At event T, the braking resistor is electrically connected across the windings of the motor 16 to cause dynamic braking. (See column 7, lines 46-56). There is no mention that the electric motor 16 is disconnected from the electrical power network. Referring to column 5, lines 42 to 48, Kilgore explains that the braking resistor can be connected to the motor by opening switchgear 44 and that during a rapid stop

procedure when the motor 16 acts as a generator, this resistor 42 dissipates energy and provides dynamic braking capability. Thus, when switch 44 is opened, the motor 16 is still connected to the electrical power network and to the generator 12, because the motor 16 is connected to the electrical power network via the braking resistor 42 and is not short circuited.

Kilgore goes on to explain that at this point, the switch 20 can be closed with the frequency converter 22 and, when this has been accomplished, the generator 12 can then be electrically disconnected from the motor by opening switch 18, shown as event V, and further that speed control can be accomplished by decreasing the output of the frequency converter 22. (See column 7, lines 56-64). At this point, the electric motor is still connected to the electrical power network via the braking resistor 42 and the frequency converter, and is not short circuited.

At event W, the motor 16 and propeller 24 reach zero speed and through phasing control of the frequency converter 22, begin reverse rotation. During this reversing operation, the turbine and the generator speed TG never go below a minimum speed since the turbine 10 and generator 12 were electrically disconnected at event V when the braking resistor 42 was also disconnected by closing switch 44. (See column 7 lines 64-column 8, line 7). At each of the points discussed above, the motor 16 is not disconnected from the electrical power network, nor is it short circuited, but is still connected via the braking resistor 42 and the frequency converter 22 (between event W and event V) and via the switch 44 and the frequency converter 22 (after event V).

Kilgore does not discuss or suggest the electric motor being disconnected from the electrical power network or short circuited in the final sentences cited by the

Examiner. (See column 8, lines 8-32). After event V, the electric motor remains connected to the electrical power network via the switch 44 and the frequency converter 22.

Instead of teaching disconnection or short circuiting, Kilgore teaches an electrical power network comprising a generator that is “capable of being connected to a synchronous motor 16 through either of two paths, depending on the condition of the switchgear 18 and 20.” (See column 5, lines 24-26). In column 5, lines 32-36, Kilgore states, “It is to be anticipated that, during transition from one connection to the other, both switchgear means 18 and 20 will temporarily be closed simultaneously so as to guarantee continuity between the generator 12 and the motor 16.” Kilgore specifically teaches that the electric motor is never disconnected from the electrical power network comprising the generator 12.

For at least this reason, the Applicant submits that claim 1 is allowable over the cited prior art. For similar reasons, the Applicant submits that claims 17, 25, and 27 are likewise allowable over the cited art. As claims 1, 17, 25, and 27 are allowable, Applicants submit that claims 2-7, 18, 23, 26, 27, and 29, which depend from allowable claims 1 and 17, are likewise allowable over the cited prior art.

Also, similarly to as discussed above with regard to claim 1, Applicants submit that claim 9, as amended, is allowable over the cited prior art at least because the cited prior art does not disclose or suggest a system having at least the combination of at least one of reducing speed and limiting the motion of a motor of a propulsion unit, the system comprising at least the combination of a propulsion unit including a turning arrangement including at least one motor unit for turning the propulsion unit and a

switch arrangement disconnecting the propeller motor from the electrical power network and for short-circuiting the stator windings of the propeller motor , as claimed in claim 9, as amended.

For at least this combination of reasons, the Applicant submits that claim 9, as amended, is allowable over the cited art. For similar reasons, the Applicant submits that claims 20, 26, and 28 are likewise allowable over the cited art. As claims 9 and 20 are allowable, the Applicants submit that claims 10-15, 21, 24, 26, 28, and 30 are therefore allowable for at least the above noted reasons and for the additional limitations that they provide.

CONCLUSION

For all of the above reasons, it is respectfully submitted that the claims now pending patentability distinguish the present invention from the cited references. Accordingly, reconsideration and withdrawal of the outstanding rejections and an issuance of a Notice of Allowance are earnestly solicited.

Should the Examiner determine that any further action is necessary to place this application into better form, the Examiner is encouraged to telephone the undersigned representative at the number listed below.

In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of time. The fee for this extension may

be charged to our Deposit Account No. 01-2300. The Commissioner is hereby authorized to charge any fee deficiency or credit any overpayment associated with this communication to Deposit Account No. 01-2300, with reference to Attorney Docket No. 108306-00025.

Respectfully submitted,

Arent Fox PLLC

A handwritten signature in black ink, appearing to read "Sheree T. Rowe". The signature is fluid and cursive, with the first name "Sheree" being more prominent.

Sheree T. Rowe
Agent for Applicants
Registration No. 59,068

Customer No. 004372
1050 Connecticut Ave., N.W.
Suite 400
Washington, D.C. 20036-5339
Telephone No. (202) 715-8492
Facsimile No. (202) 638-4810